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Confirmatory factor analysis of an emotional intelligence scale

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Abstract

Despite the popularity of the concept of emotional intelligence (EI) in recent years, several researchers question the current emotional intelligence tests on many grounds including lack of construct validity and unstable factor structure. The present study investigates the factorial validity of the Wong and Law Emotional Intelligence Scale (WLEIS) and seeks to confirm the factorial validity of this scale in different context. Results from a confirmatory factor analysis (CFA) utilizing structural equation modeling techniques supported the four-factor structure of WLEIS. Meanwhile, the psychometrics features of WLEIS supported its feasibility as a sound and reliable instrument for emotional intelligence research.

Keywords: Assessment; Structural equation modeling; Factor analysis; Emotional intelligence

1. Introduction

Research on emotional intelligence (EI) has mushroomed in the last two decades and has gained much attention from researchers especially those in the field of psychology, education and management. Since its conception, the term “emotional intelligence” has been relatively novel to researchers and the

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general public. However, the concept has gained immense popularity across a variety of disciplines because of the belief that emotional intelligence can predict life success above and beyond that predicted by cognitive intelligence (Goleman, 1995a). Emotional intelligence became an increasingly popular topic in the media after the publication of Goleman's (1995b) best-selling trade book, "Emotional intelligence: Why it can matter more than IQ?". The book has attracted the attention of the media, the general public and researchers alike since its content revealed information about the discovery of emotional competencies and prosocial behavior.

A substantial amount of research has revealed that emotional intelligence is a significant predictor of important educational, workplace and social criteria beyond what can be predicted by general mental abilities measured by IQ tests. A few studies for example, have revealed that EI has been found to be positively correlated to the academic achievement of college students (Gil-Olarte, Martin & Brackett, 2006; Lyons & Schneider, 2005; Rivers et.al., 2010; Zeidner, Shani-Zinovich, Matthews & Roberts, 2005). In relation to social functioning, other researchers have found that emotional intelligence has significantly accounted for the quality of social interactions and interpersonal relationships (Brackett, Rivers, Shiffman, Lerner & Salovey, 2006; Lopes, Salovey, Cote & Beers, 2005; Rivers et.al., 2010). At the organizational level, emotional intelligence has demonstrated a positive relationship with individual and team task performance (Carmeli & Josman, 2006; Law, Wong & Song, 2004) and leadership effectiveness (Cote, Lopes, Salovey & Miners, 2010; Kerr, Garvin & Heaton, 2006; Rao, 2006).

1.1 Emotional intelligence: Ability or trait? Or both?

Despite the plethora of research conducted on emotional intelligence, important questions about the theoretical bases of emotional intelligence are still being debated. Over the past 20 years, the term emotional intelligence has given rise to a diverse number of conceptualizations by a diverse set of interested researchers. Substantial disagreement exists regarding the definition of emotional intelligence, with respect to both its terminology and operationalization. Some investigators defined emotional intelligence as an ability to reason out emotions in guiding behavior and thinking, while others equated the definition with a constellation of emotional self-perceptions such as happiness, self-regard and flexibility. Currently, there are three main models of emotional intelligence: (1) the ability-based emotional intelligence model; (2) mixed models of emotional intelligence; and the latest one (3) trait emotional intelligence. Often, mixed models of emotional intelligence are subsumed under trait emotional intelligence (Martins, Ramalho & Morin, 2010).

The first model refers to the ability-based emotional intelligence model. This model is proposed by Peter Salovey and John D. Mayer, the pioneers of the emotional intelligence concept. The term "emotional intelligence" was initially coined by Salovey and Mayer (1990). They define it as "the ability to monitor one's own and others' feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions" (p. 189). The later definition proposed by Mayer and Salovey (1997) conceptualized EI as the ability to deal with emotion perception, emotion understanding, emotion facilitation, and emotion regulation. The initial conception of emotional intelligence as an ability to resolve emotional problems has recently been characterized as the ability model. The founders of this approach conceptualize emotional intelligence within the confines of the standard criteria for a new intelligence that can enrich the discussion of human capabilities (Mayer, Salovey, Caruso & Sitarenois, 2001) and argue that the construct meets the traditional criteria for intelligence. They perceive their model as a "cognitive ability" or "information-processing" approach, and tend to correlate highly with general mental ability (Mayer, Roberts & Barsade, 2008; Van Rooy & Viswesvaran, 2004).

The second approach known as the mixed model approach, has more recently been dominated by Bar-On's model and Goleman's models. It is known as a mixed model because it mixes the ability conception with personality traits and competencies like self-esteem, optimism and emotional self-efficacy (Brackett, Rivers, Salovey, 2011; Cherniss, 2010). Bar-On (1997) defines emotional intelligence as broad as "an array of noncognitive capabilities, competencies and skills that influence one's ability to succeed in coping with environmental demands and pressures" (p. 14). This model contains five major dimensions: interpersonal skills, intrapersonal skills, general mood, stress management and adaptability (Bar-On 1997, 2006). Similar to Bar-On's model of emotional intelligence, the second mixed model also includes the combination of related and unrelated attributes of emotional intelligence like innovation, communication and team capabilities as emotional competencies (Goleman, 1998b). This model includes four clusters of competencies: self-awareness, self-management, social awareness and relationship management Goleman, (1998). Thus, similar to Bar-On's model, this model resulted in considerable confusion by equating emotional intelligence to diverse attributes, abilities and other irrelevant characteristics.

Finally, the most recent model that emerged in the history of emotional intelligence is known as "trait emotional intelligence". Petrides, Pita and Kokkinaki, (2007) asserts that this model can be considered as a second generation model as it includes many of the personal attributes included in the earlier models. The pioneer of trait emotional intelligence (Petrides & Furnham) conceptualizes this model as "a constellation of behavioural dispositions and self-perceptions concerning one's ability to recognize, process and utilize emotion-laden information" (Petrides & Furnham, 2003, p.278). As mentioned by Petrides, Pita and Kokkinaki, (2007), this model measures four major components: (a) well-being (including happiness, self-confidence and optimism), (b) sociability (assertiveness, social competence and emotion-management of others), (c) self-control (emotion regulation, stress management and low impulsiveness), and (d) emotionality (empathy, emotion expression and emotional perception of self and others). Trait emotional intelligence is named as suchcalled because a large number of personality traits are amassed, and mixed in with a few social and emotional abilities. Recently the pioneers of trait emotional intelligence have renamed their approach as trait emotional efficacy (Petrides, 2010). In conclusion, it can be said that definitions of emotional intelligence are diversely varied and there is lack of consensus on what emotional intelligence is and what it is not.

As mentioned earlier, the definition proposed by Mayer and Salovey (1997) conceptualizes emotional intelligence as the ability to deal with emotion perception, emotion understanding, emotion facilitation, and emotion regulation. Nonetheless, some researchers also include the ability to understand others' emotions as one of the dimensions. For example, Wong and Law (2002) conceptualize EI as interrelated abilities that consist of four dimensions; self-emotional appraisal, others' emotional appraisal, regulation of emotion and use of emotion to facilitate performance (Wong & Law, 2002). Since its emergence, emotional intelligence has been defined in various ways by researchers, but, Ciarrochi, Chan and Caputi, (2000) argue that these definitions and uses "tend to be complementary rather than contradictory". Meanwhile, Joseph and Newman (2010) also used Mayer and Salovey's (1997) definition of ability-based EI in their studies, but included only three of their four dimensions, namely emotion perception, emotion understanding, and emotion regulation. The dimension of emotion facilitation was not included in their analyses as they assert that this dimension exhibits theoretical ambiguity as it is unclear how emotion facilitation differs from emotion regulation. Nevertheless, researchers perceive that although the exact dimensions are not the same among researchers, these differences are minimal.

1.2 The Wong and Law Emotional Intelligence Scale

The present study examines the factorial structure of the Wong and Law Emotional Intelligence Scale (WLEIS; Wong & Law, 2002) and seeks to confirm its factorial validity in the Malaysia context. This

instrument is grounded on an ability based model of emotional intelligence. Wong and Law (2002) adopted the integrated four-dimensional definition of EI proposed by Davies, Stankov and Roberts (1998), that had been developed based on the definition of Mayer and Salovey (1997). They chose this definition of EI because following a comprehensive review and synthesis of the EI literature by Davies, Stankov and Roberts (1998), this definition was found to be the most appropriate. The four emotional intelligence dimensions that are outlined in the WLEIS are:

(1) Appraisal and expression of emotion in one's self: This dimension relates to an individual's ability to understand his/her deep emotions and to be able to express emotions naturally. People who have good ability in this area will sense and acknowledge their emotions better than others.
(2) Appraisal and recognition of emotion in others: This component relates to an individual's ability to perceive and understand the emotions of the people around him/her. People who rate highly in this ability are very sensitive to the emotions of others and are able to predict others' emotional responses.
(3) Regulation of emotion in one's self: This relates to the ability of a person to regulate his/her emotions, enabling a more rapid recovery from psychological distress. A person with high ability in this area would be able to return quickly to normal psychological states after rejoicing or being upset. Such a person would also have better control of his/her emotions and would be less likely to lose his/her temper.
(4) Use of emotion to facilitate performance: This factor relates to the ability of a person to make use of emotions by directing them towards constructive activities and personal performance. A person who is competent in this EI dimension would be able to encourage him/herself to continuously do better and to direct his/her emotions in positive and productive directions.

This research is important as researchers intend to test the factorial validity and applicability of the Wong and Law Emotional Intelligence Scale (WLEIS; Wong & Law, 2002) in the Malaysian context. Several studies investigating the factorial validity of the WLEIS have been conducted in China (Law, Wong, Huang & Li, 2008), Europe (Libbrecht, Lievens & Schollaert, 2010), Hong Kong (Law, Wong & Song, 2004; Wong & Law, 2002), Korea (Fukuda, Saklofske, Tamaoka & Lim, 2012) and Turkey (Aslan & Erkus, 2008) by utilizing confirmatory factor analysis (CFA). The finding from these studies revealed that the WLEIS retained a four-factor solution across China, Europe, Hong Kong, Korea and Turkey. Nonetheless, to date no documented literature has been found on the study of factorial validity of the WLEIS in Malaysia. As Malaysia is a part of Asia, it is expected that the WLEIS should also be appropriate for use in the Malaysian context as the scale had originally been developed and tested in Hong Kong. Additionally, Cohen & Swerdlick (2005) assert that an additional validation study on a different population would help to verify the measure's utility beyond that of the inventory developers' setting.

Additionally, it is believed that replication of validation study is significant in that it could accumulate evidences to support the appropriateness, meaningfulness and usefulness of the specific inferences made based on the emotional intelligence test scores. This is because several researchers question the current emotional intelligence tests on many grounds including lack of construct validity and unstable factor structure (Cherniss, 2010; Matthews, Emo, Roberts, & Zeidner, 2006; Maul 2011, 2012; Van Rooy, Whitman & Viswesvaran, 2010). The present study attempts to gather construct-related evidences particularly the factorial validity of an instrument (WLEIS) as specified by the American Educational Research Association (AERA), American Psychological Association (APA) and National Council on Measurement in Education (NCME) (1999). According to AERA, APA and NCME (1999), such standards require the validation process of a measure to be on-going, with continuing efforts to establish the usefulness of the measure for specific populations and purposes.

Hence, the main focus of the present study is to examine and validate the factor structure of the Wong and Law Emotional Intelligence Scale in the Malaysian context. As the main objective of the study is to investigate the factorial validity of the WLEIS, two hypotheses are formulated. The first hypothesis suggests that the emotional intelligence construct consists of four factorial structures: (1) self-emotional appraisal; (2) others' emotional appraisal; (3) regulation of emotion; and (4) understanding of emotion. In addition, the second hypothesis hypothesizes that these four factors are related.

2. Method

2.1 Participants

In total, 505 undergraduate students (n=505) participated in this study. The age of the respondents ranged from 19 to 26 years (M = 21.70, SD = 1.33). However, 59 respondents did not report their age. The respondents consisted of 30.7% male students (n = 153) and 69.3% females (n = 346). Meanwhile, 6 of the respondents did not indicate their gender. In addition, the sample comprised students from various faculties (Engineering, Human Sciences and Islamic Revealed Knowledge, Economics and Management Sciences, Information and Communication Technology, Law, and Architecture and Environmental Design). It is worth noting that all of the respondents were ethnic Malay.

2.2 Measure

The respondents completed the Wong and Law Emotional Intelligence Scale (WLEIS; Wong & Law, 2002). The WLEIS gauges four dimensions of emotional intelligence construct: (1) Appraisal and expression of emotion in the self; (2) Appraisal and recognition of emotion in others; (3) Regulation of emotion in the self; and (4) Use of emotion to facilitate performance. It is a self-report measure that consists of 16 items and each factor consists of four items. An example of the item for 'appraisal and expression of emotion in the self' factor is "I have a good understanding of my own emotions". A sample item for 'appraisal and recognition of emotion in others' factor is "I always know my friends' emotions from their behaviour". A typical example of 'regulation of emotion in the self' factor is "I would always encourage myself to try my best". Meanwhile, a sample question for 'use of emotion to facilitate performance' factor is "I am able to control my temper so that I can handle difficulties rationally".

In this instrument, respondents are asked to indicate their level of agreement with particular statement using a seven-point Likert scale, with (1) indicating strongly disagree and (7) indicating strongly agree. The test developer reported the reliability estimates (coefficient alphas) for the four dimensions of self-emotion appraisal, uses of emotion, regulation of emotion, and others's emotion appraisal are .89, .88, .76, and .85, respectively (Wong & Law, 2002).

As most of the widely used emotional intelligence measure are proprietary (e.g., MSCEIT, EQ-i), lengthy and lack of validity evidence (Wong & Law, 2002), the WLEIS is publically available, practical, short, psychometrically sound measure of emotional intelligence and is ideal for use in much-needed empirical organization research (Joseph & Newman, 2010). Furthermore, Joseph & Newman (2010) revealed the evidence of usefulness of this scale as the WLEIS has been cited 82 times since 2002 (Social Science Citation Index, November 2009).

2.3 Procedures

The participants from one public university in Malaysia completed the self-report measure of the WLEIS during extra co-curricular activity programmes on a voluntary basis. It took approximately 6 to 8 minutes to complete the questionnaire.

2.4 Method of analyses

The data were mainly analysed by using Structural Equation Modelling (SEM) with Amos software version 16. However, the preliminary analyses in checking the assumptions and exploring the factorial structure were conducted through Statistical Package for Social Science (SPSS) software version 19. There were no missing data in this study.

3. Results and discussion

3.1 Preliminary analysis and exploratory factor analysis

Prior to doing exploratory factor analysis, the assumptions of multivariate normality and linearity were evaluated through SPSS and no violation was observed. Further, the principal components analysis (PCA) with orthogonal (varimax) rotation was conducted to explore the factorial structure of the WLEIS (Field, 2005; Tabachnick & Fidell, 2007). Based on the finding yielded by Kaiser's latent root criterion, 4 possible factors were retained (eigenvalues greater than 1). These 4-factor solutions explained 70.69% of the variance. In addition, with the threshold set at .40 for significant factor loadings, the PCA results indicated a stable factor structure for the WLEIS as all items loaded significantly unambiguously on their respective factor. No cross-factor loadings observed and most of the factor loadings were greater than .8.

3.2 Confirmatory factor analysis on the hypothesized model (Model 1)

The measurement model was further evaluated through AMOS by using confirmatory factor analysis (CFA) with Maximum Likelihood Estimation (MLE) to assess the adequacy of the model. A four-factor model of emotional intelligence construct (self-emotional appraisal, others' emotional appraisal, regulation of emotion and understanding of emotion) was hypothesized. Each factor consisted of four items. The four factors were hypothesized to covary with one another. Hence, the four factors were allowed to correlate in this model (model 1).

Based on the several goodness-of-fit criteria, the result revealed that the hypothesized model (model 1) was satisfactorily adequate and indicating an acceptable-fitting model with χ^2 (98) = 396.970, p = .000, χ^2/df = 4.051, CFI = .932 and RMSEA = .078. The hypothesized model adequately fitted the data based on few fit indices; (1) The normed chi-square was smaller than .5 (Bentler, 1990; Hair, Black, Babin & Anderson, 2010; Marsh & Hocevar, 1985); (2) The CFI was larger than .9 (Bentler, 1990; Hair et al., 2010; Hatcher, 1994); and (3) RMSEA was smaller than .08 (Byrne, 2010; Hair et al., 2010). Meanwhile, all of the items had Critical Ratio greater than 1.96 (CR > +1.96) indicating that they were significant indicators to the construct (Byrne, 2010). The Standardized Regression Weights or loading estimates for all of the items were good as most of the values were larger than .7 signifying that the items were satisfactorily related to the construct (Hair et al., 2010).

Although the hypothesized model (model 1) reached a minimum standard of an acceptable-fitting model as revealed by the good-fit indexes, the residual analysis particularly the Modification Indices (MI) showed evidence of model misspecification. It revealed the error covariances particularly the pairing of

error terms associated with items oea3 and oea4 (error oea3 ↔ error oea4; MI = 47.26) and those associated with items ue3 and ue4 (error ue3 ↔ error ue4; MI = 40.93). As revealed by the Modification Indices, the pairing of these error terms represented misspecified error covariances. Hence, the researchers revised the model by correlating these error terms in order to reach the best fitting and possibly most parsimonious model.

3.3 Confirmatory factor analysis on the revised models (Model 2 and Model 3)

In this stage, the model has been modified and the confirmatory factor analysis was reanalyzed. Again, maximum likelihood estimation was employed to estimate all models. Similar to the hypothesized model, the revised model (model 2) consisted of four factors (self-emotional appraisal (sea) others' emotional appraisal (oea), regulation of emotion (re) and understanding of emotion (re), and these factors were allowed to correlate. Each factor consisted of four items. However, in this model, the error term for items oea3 and oea4 were correlated first, as suggested by the Modification Indices (MI). Byrne (2010) asserts that only one parameter can be added to the model at a time.

After revising the model, the obtained results showed that the model (model 2) slightly improved. The goodness-of-fit indices indicated that the revised model (model 2) was a better-fitting model with χ^2 (97, N = 505) = 343.876, p = .000, χ^2/df = 3.545, CFI = .944 and RMSEA = .071. The covariance of error terms for item oea3 and oea4 (r = .35) revealed that the error terms associated with these items were moderately correlated (Cohen, 1988). This error covariance suggested that these two items were overlapping (Byrne, 2010). Item oea3 refers to "I am sensitive to the feelings and emotions of others". Meanwhile, item oea4 refers to "I have good understanding of the emotions of people around me". The researchers agreed that the content of these items were almost similar, although they were developed in different way.

Although the model has improved slightly, the post-hoc model modification was performed in an attempt to develop a better fitting and possibly more parsimonious model. As suggested by the modification indices output, the error term for items ue3 and ue4 were correlated in the next analysis. Hence, the CFA was reanalyzed in the next model (model 3) by correlating the error term for items ue3 and ue4. The final model (model 3) is presented in Figure 1; the ovals represent latent factors, rectangles represent the measured items and the small circles represent the error terms.

After revising the model, the obtained results showed that the model improved considerably. The goodness-of-fit indices indicated that the revised model (model 3) was the final better-fitting and more parsimonious model to represent the data, with χ^2 (96, N = 505) = 279.347, p = .000, χ^2/df = 2.910, CFI = .958 and RMSEA = .062. The model 3 had a better fit to the data as compared to the model 1 and model 2 because some of the fit indices improved from acceptable fit to a good fit. Although the chi-square test was significant ($p < .05$), it was acceptable as the sample size was large ($n > 350$) (Kline, 2010). The normed chi-square (< 5.0) suggested an acceptable fit for the CFA model (Bentler, 1990; Hair et al., 2010; Marsh & Hocevar, 1985). The CFI (> .95) indicated a good-fitting model (Tabachnick & Fidell, 2007). The RMSEA (≤ .06) suggested a good fit to the data (Hu & Bentler, 1999; Tabachnick & Fidell, 2007). These indices indicated a good-fitting model and the final revised model (model 3) appeared to be a good fit to the data. The final model (model 3) of the WLEIS and its parameter estimates are provided in Figure 1.

An examination of the parameter estimates revealed that all items had Critical Ratio (CR) >1.96 indicating that they were significant indicators to the emotional intelligence construct (Byrne, 2010). All of the items were significant ($p < .05$) and the loading values were ranging from .51 to .91. Majority of

the items had loading estimates greater than .7. As the loading estimates (standardized factor loadings) for all of the items were larger than .5, it signified that the items were satisfactorily good and related to the construct (Hair et al., 2010).

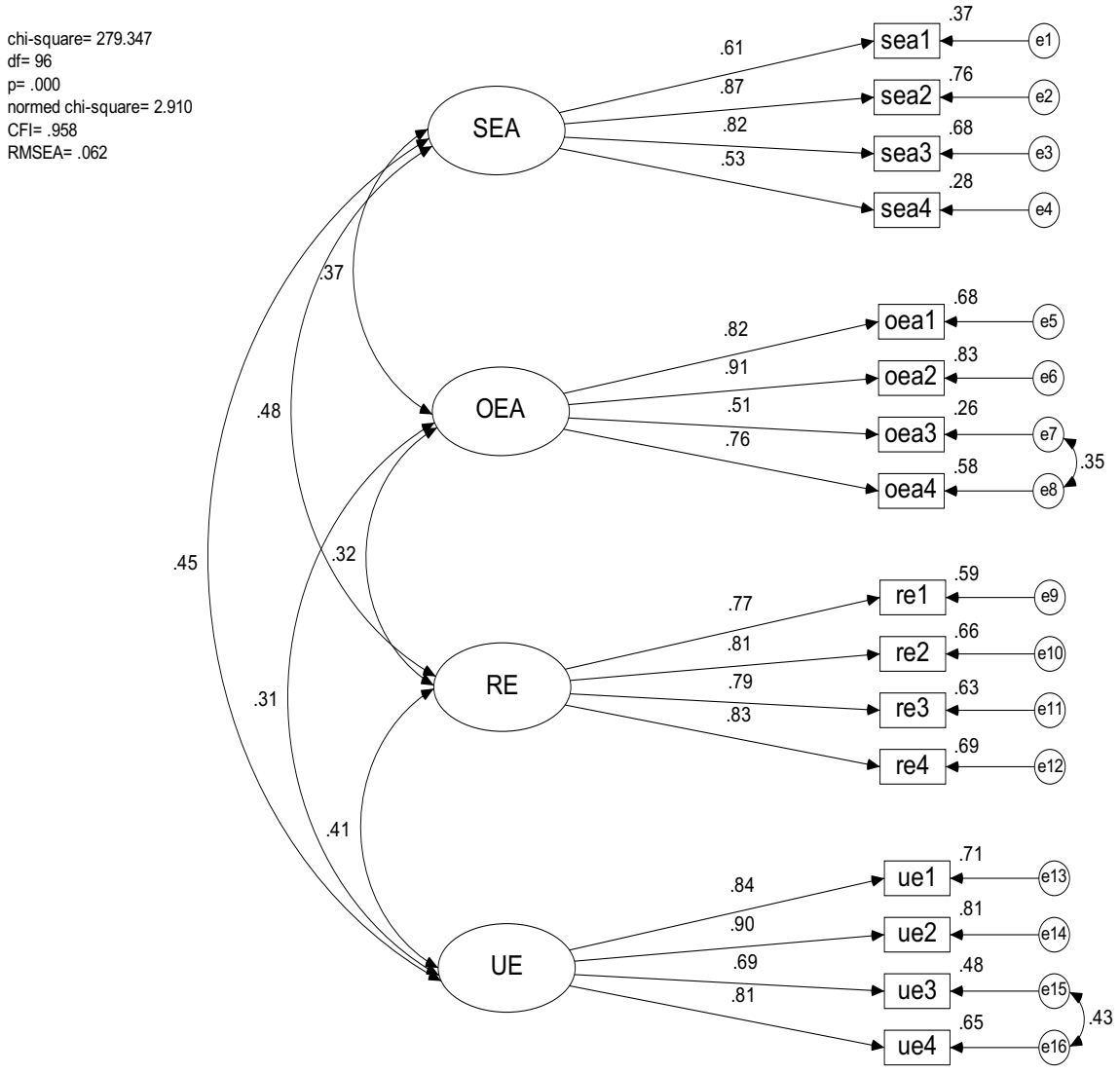

Figure 1: A measurement model of the emotional intelligence construct

The covariance of error terms for item ue3 and ue4 (r = .43) revealed that the error terms associated with these items were moderately correlated (Cohen, 1988). A source of error covariances could be a high degree of overlap in item content (Byrne, 2010). The researchers agreed with Byrne (2010) as these two items reflect redundancy. Although they were worded differently, essentially they asked the same

question. The items ue3 and ue4 refer to “I can always calm down quickly when I am angry” and “I have good control of my own emotions” respectively. Meanwhile, majority of the items also had Squared Multiple Correlation values greater than .50 (SMC > .50) indicating that the items satisfactorily explained the variance of their respective factor (Kline, 2011). In addition, the correlation coefficient among the four factors were ranging from .31 to .48 and signifying that the factors were moderately correlated (Cohen, 1988).

Therefore, the obtained results from the final revised model (model 3) suggested that the four-factor model of emotional intelligence construct was adequate and fit the data. The theory fitted the observed data well as the fit indices (normed chi-square, CFI and RMSEA) reached a minimum standard of a good-fitting model. Furthermore, the path estimates also showed that all items were good and related to the construct as all the loadings were larger than .5 and most of them were larger than .7 (Hair et al., 2010). Although covariances between error terms existed for few items, this revised model (model 3) was retained as the final model due to the meaningfulness of the model specification to the theory and such offending estimates did not indicate a major problem. Finally, the path estimates also revealed that the four factors of emotional intelligence construct were moderately correlated as suggested by the theory.

3.4 Discussion

In summary, the results of confirmatory factor analysis supported the first hypothesis that the emotional intelligence construct consists of four factors; self-emotional appraisal, others’ emotional appraisal, regulation of emotion and understanding of emotion. This hypothesis was supported as the fit indices revealed that the theory adequately fitted the data and further confirmed that the theoretical measurement model (four-factor model) was valid. A support was also found for the second hypothesis as the four factors were correlated. The path estimates showed that self-emotional appraisal, others’ emotional appraisal, regulation of emotion and understanding of emotion factors were moderately correlated among each other.

A good-fitting model obtained in this investigation documents that the WLEIS is a multidimensional scale tapping into various dimensions of emotional intelligence construct. In the initial stage, the hypothesized model revealed that the four-factor model was adequately fit the data and acceptable. However, as the residual analysis showed that few items were problematic, then, the model was revised. In the revised model, the error terms for few items were correlated; (1) error terms of item oea3 and oea4; and (2) error terms of item ue3 and ue4 in order to reach the best fitting and possibly the most parsimonious model.

The confirmatory factor analysis indicated that the final revised model (model 3) improved considerably from acceptable fit to a good-fitting model. The error covariances revealed that item oea3 and oea4 were moderately correlated as the degree of correlation was .35 (Cohen, 1988). Item oea3 refers to “I am sensitive to the feelings and emotions of others”. Meanwhile, item oea4 refers to “I have good understanding of the emotions of people around me”. The result suggested that item oea3 and item oea4 were overlapping. The researchers agreed with the findings as the content of these two items were almost identical. Similarly, item ue3 and ue4 also moderately correlated with r = .43 (Cohen, 1988). The items ue3 and ue4 refer to “I can always calm down quickly when I am angry” and “I have good control of my own emotions” respectively. These items also reflected redundancy as both of them gauged the same aspect but developed in different way.

Hence, although few items in the WLEIS were observed to be overlapping, the findings showed that the WLEIS is a sound and reliable instrument in assessing the emotional intelligence level of the current

community as it retained and validated the four-factor structure of the construct as grounded by its conceptual framework. However, the credence of item oea3, oea4, ue3 and ue4 are questionable in the current context and should be interpreted with a few considerations as they indicated content overlapping (item oea3↔ oea4, and item ue3↔ue4).

4. Conclusion

In summary, the findings confirm and validate the four-factor structure of emotional intelligence construct with the Malaysian community. Nonetheless, caution should be taken in making a generalization from these findings. First, the data were collected at one Malaysian university and comprised of ethnic Malay students only. Thus, the restriction of the sampling to a single university student population may invite some uncertainty in terms of the generalizability of the findings. The results need to be validated in other communities and different contexts, such as working populations with greater diversity. In addition, as the study assessed the factorial validity of the WLEIS only, further studies can be conducted on other issues of psychometric properties of the WLEIS particularly its construct-related validity.

In conclusion, despite the limitations, this study represents the very first in the literature to study the factorial validity of the Wong and Law Emotional Intelligence Scale in the Malaysian context and provides empirical evidences for its feasibility on this population. This study further supports and validates the professional standards for educational and psychological testing as outlined by the AERA, APA and NCME (1999). According to these organisations, such standards require the validation process to involve continuing efforts to establish the usefulness of a measure for specific populations and purposes.

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